

BATTERY WITH TRAVELING DISK'S FUNCTION

FIELD OF THE INVENTION

The present invention relates to battery with traveling disk's function adopted for use
5 on portable electrical apparatus and particularly to a battery with traveling disk's
function for storing and retrieving data.

BACKGROUND OF THE INVENTION

In the past, electrical apparatus had to be plugged into a power supply socket to
10 receive electric power. Nowadays most electrical apparatus are portable. These portable
electrical apparatus are powered by batteries.

Most batteries merely provide an electric power supply function. Some batteries offer
a vibration function to shake the portable electrical apparatus. Aside from this, the
battery offers a few other functions.

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SUMMARY OF THE INVENTION

The primary object of the present invention is to provide a battery with traveling
disk's function for storing and retrieving data.

The battery with traveling disk's function according to the invention may be
20 selectively connected to portable electrical apparatus or electrical apparatus. The battery
with traveling disk's function includes a first connector, a controller, a memory, a
transmission interface and a second connector. The first connector may be selectively
and electrically connected to a portable electrical apparatus. The controller is connected
to the first connector to transmit data. The memory is connected to the controller to store

data. The transmission interface is connected to the controller to transmit data. The second connector is connected to the transmission interface to, selectively and electrically, connect to an electrical apparatus. The battery with traveling disk's function thus constructed can store and retrieve data.

5 Therefore, the battery with traveling disk's function according to the invention can be connected electrically to a portable electrical apparatus. When transmitting data, the first connector is electrically connected to the portable electrical apparatus. The portable electrical apparatus can retrieve data stored in the memory through the controller. On the other hand, when the battery of the invention is electrically connected to the
10 electrical apparatus for data transmission, the second connector is connected electrically to the electrical apparatus so that the electrical apparatus can retrieve the data stored in the memory through the transmission interface and the controller.

 The foregoing, as well as additional objects, features and advantages of the invention will be more readily apparent from the following detailed description, which proceeds
15 with reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

 FIG. 1 is a schematic view of the battery with traveling disk's function according to the invention.

20 FIG. 2 is a schematic view of the structure of the battery with traveling disk's function according to the invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to FIGs. 1 and 2, the battery with traveling disk's function 20 according to

the invention aims to be selectively connected to a portable electrical apparatus 10 (a handset is shown in the drawings) or an electrical apparatus (such as a personal computer and notebook computer, not shown in the drawings). The invention includes a first connector 21, a controller 22, a memory 23, a transmission interface 24, a second
5 connector 25, a battery module 26 and a voltage regulator 27.

The techniques for data transmission between the battery with traveling disk's function 20, the portable electrical apparatus 10 and an electrical apparatus are first discussed as follows. The first connector 21 may be selectively and electrically connected to the portable electrical apparatus 10. The controller 22 is connected to the first connector 21
10 to transmit data. The memory 23 is connected to the controller 22 to store data. The transmission interface 24 is a universal serial bus (USB) connecting to the controller 22 to transmit data. The second connector 25 is connected to the transmission interface 24 to, selectively and electrically, connect to an electrical apparatus.

Hence the battery with traveling disk's function 20 can be connected electrically to the
15 portable electrical apparatus 10. For data transmission, the first connector 21 is connected electrically to the portable electrical apparatus 10, meanwhile, the portable electrical apparatus 10 can retrieve data stored in the memory 23 through the controller 22.

On the other hand, the battery with traveling disk's function 20 according to the
20 invention may be connected electrically to an electrical apparatus. For data transmission, the second connector 25 is connected electrically to the electrical apparatus, meanwhile, the electrical apparatus can retrieve data stored in the memory 23 through the transmission interface 24 and the controller 22.

When the battery with traveling disk's function 20 delivers electric power, the battery
25 module 26 is connected to the first connector 21 to provide electric power for the portable electrical apparatus 10. The voltage regulator 27 is connected to the battery

module 26, first connector 21, controller 22 and memory 23 to obtain electric power and regulate the voltage, and delivers electric power to the first connector 21, controller 22 and memory 23. The battery module 26 is connected to the transmission interface 24 so that when the second connector 25 is electrically connected to the electrical apparatus, electric power is delivered, through the transmission interface 24, to the battery module 26 for storing electric power.

Thus when the battery with traveling disk's function 20 is electrically connected to the portable electrical apparatus 10 and delivers electric power, the first connector 21 may be electrically connected to the portable electrical apparatus 10. Meanwhile, the battery module 26 may deliver electric power to the voltage regulator 27, which regulates the voltage and delivers electric power to the first connector 21, controller 22 and memory 23 to provide the electric power required. Of course, because the first connector 21 is electrically connected to the portable electrical apparatus 10, the portable electrical apparatus 10 has electric power needed during operation.

On the other hand, the battery with traveling disk's function 20 is electrically connected to the electrical apparatus. For transmitting electric power, the second connector 25 is electrically connected to the electrical apparatus. Meanwhile, the electrical apparatus delivers electric power to the battery module 26 through the transmission interface 24 for storing electric power.

While the preferred embodiments of the invention have been set forth for the purpose of disclosure, modifications of the disclosed embodiments of the invention as well as other embodiments thereof may occur to those skilled in the art. Accordingly, the appended claims are intended to cover all embodiments, which do not depart from the spirit and scope of the invention.